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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,178	12/23/2004	Thierry Nuris	RN02005	5531
<div><div>7590</div><div>10/29/2007</div><div>RHODIA INC 8 CEDAR BROOK DRIVE CN7500 CRANBURY, NJ 08512</div></div>				
			<div>EXAMINER</div> <div>LEO, LEONARD R</div>	
			<div>ART UNIT</div> <div>3744</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>10/29/2007</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/502,178

Applicant(s)

NURIS ET AL.

Examiner

Leonard R. Leo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-26,30,31 and 33-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-26,30,31 and 33-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed on June 20, 2007 has been entered. Claims 27-29 and 32 are cancelled, and claims 20-26, 30-31 and 33-38 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 34 recites the limitation "the inner bundle" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-26, 28-29 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lameris.

Lameris discloses a heat exchanger comprising a distributor 9, manifold 6 and a first segment 10 and second segment 11 wound along a helical generatrix with substantially the same bending radius; but does not disclose the radius of the distributor and/or manifold being substantially equal to the bundle.

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The specific radius of the distributor and/or manifold is considered to be an obvious design expedient, producing no new and/or unexpected results and solving no stated problem. One of ordinary skill in the art would employ any sized radius for the purpose of accommodating the fluid requirements.

The recitation of "A reactor for treating a viscous medium or for carrying out chemical reactions in viscous medium" is considered to be a statement of intended use, even if claimed, does not merit patentable weight unless the body of the claim refers back to, is defined by, or otherwise draws life and breadth from such intended use. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claims 21-22, Lameris discloses a second bundle having two segments 13-14 wound along a helical generatrix with a smaller bending radius. Regarding claim 23, Lameris discloses a third segment 12.

Regarding claim 24, the first, second and third segments 10-12 have the same length.

Regarding claim 25, tube 4 extends along an axis parallel to the bundle and is connected to the distributor 9.

Regarding claim 26, the distributor 9 and manifold 6 have a torus form.

Regarding claims 35-38, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claims 30-31 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lameris in view of Ono et al.

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Lameris discloses all the claimed limitations except an agitator.

Ono et al discloses a reactor comprising a vessel 1, heat exchanger 2 and agitator 5, 8, 9 for the purpose of improving heat exchange.

Since Lameris and Ono et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Ono et al would have been recognized in the pertinent art of Lameris.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Lameris an agitator for the purpose of improving heat exchange as recognized by Ono et al.

Regarding claim 31, Ono et al discloses shaft 12 suspending the agitator 8, 9 surrounding the heat exchanger 2 with inlet 3 and outlet 4 at the bottom of the vessel 1.

Regarding claim 33, the heat exchanger 2 of Ono et al is about 45% of the vessel radius.

Regarding claim 34, the specific radius of the bundle is considered to be an obvious design expedient, producing no new and/or unexpected results and solving no stated problem. One of ordinary skill in the art would employ any radius of the bundle to achieve a desired amount of heat exchange.

Response to Arguments

The objection to the drawings under 37 CFR 1.83(a) is withdrawn in view of the cancellation of claim 32.

The rejection of claims 25-27 and 31 under 35 U.S.C. 112, second paragraph, is withdrawn in view of the claim amendments.

The rejection in view of Peff and Fordsmand are withdrawn in view of the claim amendments.

Applicants' arguments have been fully considered but they are not persuasive. Applicants' remarks are not commensurate in scope with the claims. The Examiner understands why the distributor/manifold has a radius substantially equal the first bundle. However, the claim does not reflect structure to support applicants' reasoning. In the device of Lameris, the distributor/manifold is located outside the vessel and does not obstruct any medium flow. One of ordinary skill in the art would employ any sized radius for the purpose of accommodating the fluid requirements.

The rejection in view of Ono et al teaching an agitator for the purpose of improving heat exchange is deemed correct for lack of any argument by applicants.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

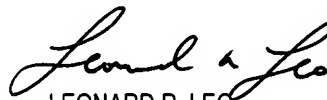
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard R. Leo whose telephone number is (571) 272-4916. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834834. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


LEONARD R. LEO
PRIMARY EXAMINER
ART UNIT 3744

October 26, 2007